

DIRECT TESTIMONY
OF
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ILLINOIS COMMERCE COMMISSION

INVESTIGATION INTO COMPLIANCE WITH THE EFFICIENCY STANDARD REQUIREMENT OF
SECTION 8-103 OF THE PUBLIC UTILITIES ACT.

COMMONWEALTH EDISON COMPANY

DOCKET No. 10-0520

OCTOBER 11, 2011

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ATTACHMENTS

**ICC STAFF EXHIBIT 1.1 – NAVIGANT’S DRR-STAFF JLH 2, REVISED SUMMARY EVALUATION
RESULTS PLAN YEARS 1 AND 2 (FOR DETERMINING “BANKING” OF ENERGY SAVINGS)**

**ICC STAFF EXHIBIT 1.2 – NAVIGANT’S DRR-STAFF JLH 1, SUMMARY EVALUATION RESULTS
PLAN YEARS 1 AND 2 (FOR DETERMINING PENALTIES PURSUANT TO 220 ILCS 5/8-103(i))**

ICC STAFF EXHIBIT 1.3 – NAVIGANT’S DRR-STAFF JLH 1, COMED PRESCRIPTIVE PY2 NTG

**ICC STAFF EXHIBIT 1.4 – COMED LIGHTING LOGGER STUDY RESULTS FOR ILLINOIS-BASED
HOURS OF USE (HOU) AND PEAK COINCIDENCE FACTOR (CF) ESTIMATES**

**ICC STAFF EXHIBIT 1.5 – COMED RESIDENTIAL ENERGY STAR LIGHTING PROGRAM METERING
STUDY – OVERVIEW OF STUDY PROTOCOLS**

I. WITNESS QUALIFICATIONS

Q. Please state your name, business address, and job title.

A. Jennifer L. Hinman, Illinois Commerce Commission, 527 East Capitol Avenue, Springfield, Illinois 62701. I am employed as an Economic Analyst in the Energy Division's Policy Program under the Bureau of Public Utilities at the Illinois Commerce Commission ("ICC" or "Commission").

Q. Describe your educational background.

A. In May of 2010, I graduated from Illinois State University with a Master of Science degree in Applied Economics with a specialization in the Electricity, Natural Gas, and Telecommunications Economics Regulatory sequence. In May of 2008, I earned a Bachelor of Arts degree in Economics with a Financial Certificate and graduated summa cum laude from the University Honors Program at Armstrong Atlantic State University in Savannah, Georgia.

Q. Describe your professional experience.

A. Prior to joining the Commission Staff ("Staff") in April of 2010, I worked as a Graduate Assistant in the Applied Economics Department at Illinois State University. I was an intern in the Regulatory Department at AT&T Illinois in Chicago during the summer of 2009. During my time at AT&T, I analyzed, compiled, graphed, and provided detailed recommendations on AT&T Illinois' Alternative Regulation Plan on individual service margins. In addition, I reviewed the tariffing process and assisted in the filing of wholesale tariffs.

22 **II. SUBJECT MATTER AND PURPOSE OF TESTIMONY**

23 **Q. What is the subject matter of this proceeding?**

24 A. Section 8-103¹ of the Illinois Public Utilities Act² (“Act”) sets forth requirements for
25 large electric utilities to develop and execute Plans and programs to promote cost-
26 effective energy efficiency (“EE”) and demand-response measures. (220 ILCS 5/8-
27 103). The initial EE Plans³ prepared by Commonwealth Edison Company
28 (“ComEd” or “Company”) and the Illinois Department of Commerce and Economic
29 Opportunity (“DCEO” or “Department”) were considered by the Commission in
30 Docket No. 07-0540 (“Plan 1 Docket”).⁴ On February 6, 2008, the EE Plans were
31 approved by the Commission subject to the conditions, modifications, and
32 requirements stated in the Commission’s Final Order (“Plan 1 Order”).⁵

33 Section 8-103 of the Act sets forth energy efficiency standards and provides
34 for penalties if a utility does not meet these standards:

35 If, after 2 years, an electric utility fails to meet the efficiency
36 standard specified in subsection (b) of this Section, as modified by
37 subsections (d) and (e), it shall make a contribution to the Low-
38 Income Home Energy Assistance Program... a large electric utility
39 shall pay \$665,000.

40 (220 ILCS 5/8-103(i)). This case, initiated on August 30, 2010 by the Commission,
41 concerns the investigation into whether ComEd met the energy efficiency standard

¹ Section 12-103 of the Act was amended and renumbered as Section 8-103 by Public Act 95-0876, effective as of August 21, 2008.

² 220 ILCS 5/1-101 *et seq.*

³ Commonwealth Edison Co., Docket No. 07-0540, ComEd Ex. 1.0, *Commonwealth Edison Company’s 2008 – 2010 Energy Efficiency and Demand Response Plan*, Nov. 15, 2007 (“Plan 1”) and Commonwealth Edison Co., Docket No. 07-0540, DCEO Exs. 1.0 – 1.15, Compliance – Documents from 07-0541 pursuant to the Administrative Law Judge’s Ruling dated Jan. 10, 2008. Filed Jan. 4, 2008

⁴ Commonwealth Edison Co., Docket No. 07-0540 (“Plan 1 Docket”)

⁵ Commonwealth Edison Co., Docket No. 07-0540, Final Order, Feb. 6, 2008 (“Plan 1 Order”)

during the period June 2009 through May 2010, referred to herein as Plan Year 2 (“PY2”).⁶ Based on language in the Plan 1 Order, the investigation also requires an assessment of energy savings that took place during the June 2008 through May 2009 time period, referred to herein as Plan Year 1 (“PY1”), to determine the amount of energy savings the Company has “banked”, if any, for use in future Plan Years, subject to the applicable Commission orders. (Plan 1 Order at 41; Plan 2 Order⁷ at 19).

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is as follows:

(a) Provide an overview of the energy efficiency and demand-response standards⁸ and “banking” provisions as approved by the Commission in the Plan 1 Order.

(b) Present my findings and recommendations regarding: (1) the amount of energy savings the Company has “banked” to date; and (2) whether the Company should be assessed penalties pursuant to 220 ILCS 5/8-103(i).

III. SUMMARY OF RESULTS AND RECOMMENDATIONS

Q. Please summarize the results from your review.

A. Nothing came to my attention that would indicate the energy efficiency standards set forth in Section 8-103 of the Act have not been met. Based on the independent

⁶ Plan 1 consists of Plan Year 1 (“PY1”) 2008, Plan Year 2 (“PY2”) 2009, and Plan Year 3 (“PY3”) 2010. A Plan Year runs from the June monthly billing period through the May monthly billing period.

⁷ Commonwealth Edison Co., Docket No. 10-0570, Final Order, Dec. 21, 2010 (“Plan 2 Order”)

⁸ It appears that Section 8-103 of the Act uses the following terms interchangeably: incremental annual energy savings goals, annual savings targets, savings goals, incremental annual performance goals, energy efficiency and demand-response standards, efficiency standard(s), requirements, goal, and required energy efficiency measures. Therefore, I use these terms interchangeably throughout this testimony.

evaluation team's findings, the energy efficiency standards specified in Section 8-103 of the Act were exceeded in the first two Plan Years. (Navigant's DRR-Staff JLH 2; Staff Ex. 1.1; PY1 EM&V Summary Report⁹ at 1; PY2 EM&V Summary Report¹⁰ at 1). The achievement of energy savings in excess of the statutory efficiency standards results in 42,967 megawatt-hours¹¹ ("MWh") of "banked" energy savings available for use to comply with future standards, if necessary, subject to certain limitations that were set forth in two Commission orders. (Staff Ex. 1.1; Plan 1 Order at 41; Plan 2 Order at 19).

Q. What are your overall recommendations to the Commission?

A. I recommend that the Commission make two findings:

- 1) the statutorily-mandated energy efficiency standards for the first two Plan Years set forth in Section 8-103 were achieved in the ComEd service territory; and
- 2) 42,967 MWh of "banked" energy savings is available for use to comply with the energy efficiency standards in future Plan Years, if necessary, subject to applicable Commission orders. (*Id.*).

IV. IDENTIFICATION OF ATTACHMENTS

Q. Will you be sponsoring any exhibits with your direct testimony?

⁹ Docket No. 07-0540, *Report Attachment 1 – Evaluation Summary*, filed March 12, 2010. Summit Blue Consulting, LLC, 2009. *Energy Efficiency / Demand Response Plan: Plan Year 1 (6/1/2008-5/31/2009) Evaluation Report: Summary Report*. Submitted to Commonwealth Edison Company. Presented by Summit Blue Consulting, Itron, Opinion Dynamics Corporation, and Michaels Engineering. Dec. 23, 2009 ("PY1 EM&V Summary Report")

¹⁰ Docket No. 10-0520, *Summary Report*, filed March 4, 2011. Navigant Consulting, 2010. *Energy Efficiency / Demand Response Plan: Plan Year 2 (6/1/2009-5/31/2010) Evaluation Report: Summary Report*. Submitted to Commonwealth Edison Company. Presented by Navigant Consulting, Itron, Opinion Dynamics Corporation, and Michaels Engineering. Dec. 21, 2010 ("PY2 EM&V Summary Report")

¹¹ 1 megawatt-hour = 1,000 kilowatt-hours ("kWh")

A. Yes. Staff Exhibits (“Exs.”) 1.1 through 1.5. These exhibits will be referenced throughout this testimony and primarily consist of data request responses and memorandums from the independent evaluation team.¹²

- Staff Ex. 1.1 – Navigant’s DRR-Staff¹³ JLH 2, Revised Summary Evaluation Results Plan Years 1 and 2 (for determining “banking” of energy savings)
- Staff Ex. 1.2 – Navigant’s DRR-Staff JLH 1, Summary Evaluation Results Plan Years 1 and 2 (for determining penalties pursuant to 220 ILCS 5/8-103(i))
- Staff Ex. 1.3 – Navigant’s DRR-Staff JLH 1, ComEd Prescriptive PY2 NTG – 2011-05-13 (for “deeming” pursuant to the NTG¹⁴ framework for PY4)
- Staff Ex. 1.4 – ComEd Lighting Logger Study Results for Illinois-based Hours of Use (HOU) and Peak Coincidence Factor (CF) Estimates
- Staff Ex. 1.5 – ComEd Residential Energy Star Lighting Program Metering Study – Overview of Study Protocols

V. ENERGY EFFICIENCY AND DEMAND-RESPONSE STANDARDS

Q. Provide an overview of the energy efficiency and demand-response standards.

¹² Navigant Consulting was hired pursuant to 220 ILCS 5/8-103(f)(7) to independently evaluate the energy efficiency programs implemented in the ComEd service territory.

¹³ Navigant’s Data Request Response to Staff (“Navigant’s DRR-Staff”)

¹⁴ The Commission adopted the net-to-gross (“NTG”) framework in the Plan 2 Order. (Plan 2 Order at 19). The NTG framework allows the estimated NTG ratio values from PY2 to be “deemed” for use in the PY4 evaluations, subject to certain limitations. (*Id.*). Both *gross* and *net* energy savings estimates are presented in Table 6 of this testimony. The impact of applying the estimated NTG ratio values to the *gross* energy savings estimates is significant: 752,895 MWh *gross* energy savings and 497,848 MWh *net* energy savings (after NTG ratio application). The specific details underlying the NTG ratio estimates are contained in all of the independent program evaluation reports filed in this docket. I recommend the Lighting End-Use NTG Ratio of 0.75 be “deemed” for PY4, subject to the provisions of the NTG framework. (*Id.*; Staff Ex. 1.3 at 2).

93 A. Section 8-103 of the Act requires that “Electric utilities... implement cost-effective
94 energy efficiency measures to meet the following incremental annual energy
95 savings goals... 0.2% of energy delivered in the year commencing June 1, 2008
96 [Plan Year 1]... 0.4% of energy delivered in the year commencing June 1, 2009
97 [Plan Year 2, and]... 0.6% of energy delivered in the year commencing June 1,
98 2010 [Plan Year 3]....” (220 ILCS 5/8-103(b)). In addition, the statute requires that
99 ComEd “implement cost-effective demand-response measures to reduce peak
100 demand by 0.1% over the prior year for eligible retail customers....” (220 ILCS 5/8-
101 103(c)). The Act also requires that “The portfolio of measures, administered by
102 both the utilities and the Department, shall, in combination, be designed to achieve
103 the annual savings targets described in subsections (b) and (c) of this Section, as
104 modified by subsection (d) of this Section.” (220 ILCS 5/8-103(e)).

105 **Q. What are the statutory energy savings goals approved by the Commission in**
106 **the Plan 1 Order?**

107 A. For the ComEd service territory, “the statutory savings goals... are as follows: (1)
108 year commencing in June 2008 – savings goal of 188,739 MWh; (2) year
109 commencing in June 2009 – savings goal of 393,691 MWh; and (3) year
110 commencing in June 2010, savings goal 584,077 MWh.” (Plan 1 Order at 10-11).
111 The Plan 1 Order states that “the utilities and DCEO further agreed that the DCEO
112 share of the annual kilowatt savings targets would be less than 25% with the
113 relevant utility making up the difference.” (*Id.* at 19). Further, the Plan 1 Order
114 states, “As between ComEd and DCEO, DCEO’s programs will account for
115 approximately 21% (ranging from 18.6%- 21.5%) of the total kilowatt savings during

the first three planning years....” (Plan 1 Order at 19; Plan 1 Docket, DCEO Ex. 1.0 at 12; Plan 1 Docket, DCEO Ex. 1.1). However, the statute further provides that “No electric utility shall be deemed to have failed to meet the energy efficiency standards to the extent any such failure is due to a failure of the Department or the Agency.” (220 ILCS 5/8-103(k)). Thus, in terms of assessing penalties pursuant to 220 ILCS 5/8-103(i), DCEO’s “portion” of the energy savings goal will be ignored. Table 1 below presents the energy efficiency standards approved by the Commission for the ComEd service territory.

Table 1. Section 8-103 Energy Efficiency and Demand-Response Standards for Plan 1

ComEd Service Territory		2008 (PY1)	2009 (PY2)	2010 (PY3)	Source
Incremental Annual Energy Savings Goals: Incremental % of Energy Delivered	%	0.2%	0.4%	0.6%	220 ILCS 5/8-103(b)
Energy Delivered	MWh	94,363,626	95,922,777	97,346,119	Docket No. 07-0540, DCEO Ex. 1.1
Energy Efficiency Standards	MWh	188,729	393,691	584,077	Docket No. 07-0540, Final Order at 10-11; Docket No. 07-0540, DCEO Ex. 1.1; Docket No. 07-0540, ComEd Ex. 1.0 at 16
Peak Demand Reduction Standard: % of prior year eligible retail peak demand	%	0.1%	0.1%	0.1%	220 ILCS 5/8-103(c)
Demand-Response Standards	MW	11.7	11.1	10.0	Docket No. 07-0540, Final Order at 14; Docket No. 07-0540, ComEd Ex. 1.0 at 16

VI. “BANKING” ENERGY SAVINGS

Q. Provide an overview of “banking” energy savings.

A. The Commission previously ruled that, if ComEd and DCEO were to achieve energy savings in excess of the statutory savings goal in one Plan Year, that excess could count toward the fulfillment of a subsequent Plan Year’s energy savings goal. (Plan 1 Order at 40-41). However, the Commission imposed certain limitations on this “banking” privilege:

Limiting the amount of allowable “banked energy savings” to a percentage of the banked year’s energy savings is reasonable. It is also reasonable to limit the amount that can be “banked” to one which would only allow utilities to “bank” a *de minimus* carry over, as anything further would violate the statute. Therefore, ComEd’s and DCEO’s request for Commission approval of “banked” energy savings is granted, but, they may “bank” no more than 10 percent of the energy savings required by statute in the year, in which, it is “banked.”

(*Id.*).

Q. The Commission concluded that ComEd and DCEO “may ‘bank’ no more than 10 percent of the energy savings required by statute in the year, in which, it is ‘banked.’” (Plan 1 Order at 40-41). What is the maximum amount of energy savings that potentially can be “banked” at the end of Plan Year 2?

A. For PY1, the maximum “banking” allowed is an incremental 18,873 MWh $[(PY1 \text{ Statutory Energy Savings Goal} \times 10\%)]$ in the event the statutory energy efficiency goal of 188,729 MWh for PY1 has been sufficiently exceeded. (*Id.* at 10-11). For PY2, the maximum “banking” allowed is an incremental 39,369 MWh $[(PY2 \text{ Statutory Energy Savings Goal} \times 10\%)]$ in the event the statutory savings goal of 393,691 MWh for PY2 has been sufficiently exceeded. (*Id.*). Therefore, the maximum (assuming the EE standards are exceeded by 10% each Plan Year) total allowable amount of energy savings that potentially can be “banked” at the end of PY2 for use in complying with energy efficiency goals in future Plan Years must be less than or equal to 58,242 MWh. (*Id.* at 41).

Table 2 below presents a summary of the statutory EE standards and the maximum amount of “banking” allowed for the ComEd service territory pursuant to the direction provided in the Plan 1 Order. (*Id.*).

Table 2. Potential "Banking" of Energy Savings per the Plan 1 Order

ComEd Service Territory		2008 (PY1)	2009 (PY2)	2010 (PY3)	Source
Energy Efficiency Standards	MWh	188,729	393,691	584,077	Docket No. 07-0540, Final Order at 10-11; Docket No. 07-0540, DCEO Ex. 1.1; Docket No. 07-0540, ComEd Ex. 1.0 at 16
Maximum Incremental "Banking" Allowed per Commission Order	%	10%	10%	10%	Docket No. 07-0540, Final Order at 41
Maximum Incremental "Banking" Allowed per Commission Order	MWh	18,873	39,369	58,408	Energy Efficiency Standard*10%
Maximum Cumulative "Banked" Energy Savings Allowed per Commission Order	MWh	18,873	58,242	116,650	Sum of Incremental "Banking"

VII. PENALTIES PURSUANT TO 220 ILCS 5/8-103(i) AND COMED'S "PORTION" OF THE ENERGY SAVINGS GOAL

Q. Is ComEd required to achieve the entire annual incremental savings target of 393,691 MWh for Plan Year 2 in order to avoid the penalties set forth in subsection (i) of Section 8-103 of the Act?

A. No. The specific provision relevant to this proceeding states:

If, after 2 years, an electric utility fails to meet the efficiency standard specified in subsection (b) of this Section, as modified by subsections (d) and (e), it shall make a contribution to the Low-Income Home Energy Assistance Program... a large electric utility shall pay \$665,000.

(220 ILCS 5/8-103(i)). While I am not an attorney, it is my understanding that the assessment of penalties under subsection (i) specifically directs that the efficiency standard pursuant to subsection (b) shall be "modified" by the provisions of subsections (d) and (e). This "modification" by subsection (e)¹⁵ implies that the Company shall be penalized only if it does not meet the "measurable corresponding percentage of the savings goals associated with measures implemented by the

¹⁵ "Modification" by subsection (d) of Section 8-103 of the Act is not relevant in this proceeding because the Company did not reach the ratepayer financial impact cap during Plan Year 2. "In fact, during PY2 ComEd spent \$15.7 million less than projected". (Docket No. 10-0537, ComEd Ex. 2.0 at 2).

utility” that were agreed to by the Department, and that were approved by the Commission in the Company’s EE Plan proceeding initiated pursuant to subsection (f), or a subsequent modified EE Plan proceeding initiated pursuant to subsection (e). (220 ILCS 5/8-103(e)).

Q. What amount of energy savings was ComEd required to achieve to avoid penalties pursuant to subsection (i) of Section 8-103 of the Act?

A. For PY2, ComEd’s “portion” of the statutory energy savings goal approved by the Commission is 312,038 MWh (79.3% of statutory goal). (Plan 1 Order at 19; Plan 1 Docket, DCEO Ex. 1.1).

The Commission stated that “DCEO’s programs will account for approximately 21% (ranging from 18.6%- 21.5%) of the total kilowatt savings during the first three planning years”. (Plan 1 Order at 19). The range in percentages is consistent with those contained in DCEO’s EE Plan approved by the Commission. (*Id.*; Plan 1 Docket, DCEO Ex. 1.1). Table 3 below presents ComEd’s “portion” of the energy efficiency standards approved by the Commission that ComEd is responsible for and held accountable to in terms of the assessment of penalties pursuant to 220 ILCS 5/8-103(i).

Table 3. ComEd's "Portion" of the Energy Efficiency Standards

ComEd Service Territory		2008 (PY1)	2009 (PY2)	2010 (PY3)	Plan 1	Source
Energy Efficiency Standards	MWh	188,729	393,691	584,077	1,166,497	Docket No. 07-0540, Final Order at 10-11; Docket No. 07-0540, DCEO Ex. 1.1; Docket No. 07-0540, ComEd Ex. 1.0 at 16
ComEd's "Portion" of the Energy Efficiency Standards	%	78.6%	79.3%	78.5%	78.8%	Docket No. 07-0540, Final Order at 19; Docket No. 07-0540, DCEO Ex. 1.1
ComEd's "Portion" of the Energy Efficiency Standards	MWh	148,317	312,038	458,656	919,010	Docket No. 07-0540, DCEO Ex. 1.1

Q. Does ComEd agree with its “portion” of the energy savings goal that you present above?

A. No. ComEd’s interpretation of its “portion” of the savings goal differs from that supported by Staff. ComEd uses the “portion” of the savings goal as presented in its EE Plan,¹⁶ while I use the “portion” of the savings goal as presented in DCEO’s EE Plan and as ultimately adopted by the Commission in the Plan 1 Order.¹⁷ (ComEd Ex. 1.0 at 4; Plan 1 at 2; Plan 1 Order at 19; Plan 1 Docket, DCEO Ex. 1.1). Table 4 below presents a comparison of my understanding of ComEd’s “portion” of the savings goal (top row) with what I believe to be ComEd’s understanding of its “portion” of the savings goal (bottom row).

Table 4. Comparison of Differing Views of ComEd's "Portion" of the Energy Efficiency Standards

ComEd Service Territory		2008 (PY1)	2009 (PY2)	2010 (PY3)	Plan 1	Source
Staff's Position: ComEd's "Portion" of the Energy Efficiency Standards	MWh	148,317	312,038	458,656	919,010	Docket No. 07-0540, Final Order at 19; Docket No. 07-0540, DCEO Ex. 1.1
ComEd's Position: ComEd's "Portion" of the Energy Efficiency Standards	MWh	148,842	312,339	458,919	920,100	ComEd Ex. 1.0 at 4; Docket No. 07-0540, ComEd Ex. 1.0 at 2

VIII. FINDINGS

A. “BANKED” ENERGY SAVINGS

Q. Summarize the independent evaluation team’s estimated energy savings results and the cumulative amount of energy savings “banked” at the end of PY2.

¹⁶ While ComEd witness Brandt asserts the Plan 1 Order approved the savings goal split presented in his testimony, he provides no citations to specific pages within the Plan 1 Order approving this split. (ComEd Ex. 1.0 at 4).

¹⁷ See also, the ComEd and DCEO Initial Briefs filed in the Plan 1 Docket. The Commission ultimately adopted language in the Plan 1 Order similar to that recommended by DCEO in its Brief, thus implicitly rejecting ComEd’s recommended division of the energy efficiency standards between DCEO and ComEd as presented in ComEd’s Brief.

211 A. Table 5 below summarizes the incremental amount of energy savings achieved in
212 the ComEd service territory estimated by the independent evaluation team, and the
213 corresponding amount of energy savings “banked” at the end of PY2 for use in
214 complying with energy efficiency standards in future Plan Years, if needed. The
215 total amount of energy savings that are actually “banked” at the end of PY2 for use
216 in complying with energy efficiency standards in future Plan Years is 42,967 MWh.
217 During the first two Plan Years, the independent evaluation team estimated that
218 energy consumption was reduced by an incremental¹⁸ 724,213 MWh in the ComEd
219 service territory due to the influence of the energy efficiency programs implemented
220 pursuant to Section 8-103 of the Act.

¹⁸ The “incremental” energy savings estimates for PY1 and PY2 are reported as “incremental” first-year energy savings estimates (consistent with the “incremental” energy savings standards set forth in 220 ILCS 5/8-103(b)) meaning the “incremental” energy savings estimates for PY2 are based solely on the “incremental” energy efficiency measures installed during PY2. Further, these PY2 estimates exclude the second year of energy savings resulting from the energy efficiency measures installed during PY1. The total evaluation-verified net energy savings estimates for the ComEd service territory (based on energy savings estimates resulting from the statutory energy efficiency programs implemented pursuant to 220 ILCS 5/8-103 by ComEd and the Department) is the sum of the first-year energy savings achieved incrementally in PY1 and PY2, 724,213 MWh $[(192,327+531,886)]$. (PY1 EM&V Summary Report at 17; Navigant’s DRR-Staff JLH 2.01-2.03; Staff Ex. 1.1 at 3, 7, 12). Note that the sum of the incremental energy savings required in PY1 and PY2 is 582,420 MWh $[(188,729+393,691)]$, thus the energy efficiency standards set forth in 220 ILCS 5/8-103(b) were exceeded by 141,793 MWh over PY1 and PY2. (*Id.*; Plan 1 Order at 10-11).

Table 5. Staff-Recommended Amount of “Banked” Energy Savings for the ComEd Service Territory

ComEd Service Territory		2008 (PY1)	2009 (PY2)	Source
Energy Efficiency Standards	MWh	188,729	393,691	Docket No. 07-0540, Final Order at 10-11; Docket No. 07-0540, DCEO Ex. 1.1; Docket No. 07-0540, ComEd Ex. 1.0 at 16
Potential Incremental "Banking" Allowed per Commission Order	%	10%	10%	Docket No. 07-0540, Final Order at 41
Potential Incremental "Banking" Allowed per Commission Order	MWh	18,873	39,369	Energy Efficiency Standard*10%
Maximum Potential Cumulative "Banked" Energy Savings Allowed per Commission Order	MWh	18,873	58,242	Sum of Potential Incremental "Banking"
Evaluation-Verified Net Energy Savings Estimates	MWh	192,327	531,886	PY1 EM&V Summary Report at 17; Navigant's DRR-Staff JLH 2.01-2.03; Staff Ex. 1.1 at 3,7,12
Evaluation-Verified Net Energy Savings Estimates in Excess of Energy Efficiency Standards	MWh	3,598	138,195	Estimated Energy Savings Results for the ComEd Service Territory Less Energy Efficiency Standards pursuant to 220 ILCS 5/8-103(b) for the ComEd Service Territory
Actual Incremental "Banked" Energy Savings	MWh	3,598	39,369	Energy Savings in Excess of Energy Efficiency Standards if Less than Max Potential Incremental "Banking" Allowed per Commission Order, otherwise Max Allowed per Commission Order
Actual Cumulative "Banked" Energy Savings	MWh	3,598	42,967	Sum of Actual Incremental "Banked" Energy Savings

Q. Does ComEd agree that it has 42,967 MWh of energy savings “banked” at the end of PY2?

A. No. ComEd believes that it “has 46,109 MWh banked that can be used in a future year of the portfolio to achieve the statutory goal.” (ComEd Ex. 1.0 at 7). These two levels of “banked” energy savings differ for two reasons: (1) ComEd calculates “banked” energy savings as those savings in excess of its “portion” of the energy efficiency goal (within 110% of ComEd’s “portion” of the goal) without regard to whether the statutory energy efficiency standard was met; and (2) ComEd uses the “deemed” lighting savings values,¹⁹ while I use the evaluator-recommended values

¹⁹ (Plan 1 Order at 41-42; Staff Ex. 1.2).

based on primary data collected from the ComEd service territory,²⁰ as discussed further in the next section.

To expand, in contrast to Staff's position, ComEd calculates "banked" energy savings based on what it believes its "portion" of the energy savings goal to be rather than basing the amount of "banked" energy savings on the energy savings achieved in excess of the statutory efficiency goal pursuant to 220 ILCS 5/8-103(b) set forth by the General Assembly to achieve the policy objectives articulated in 220 ILCS 5/8-103(a). In addition, as mentioned previously in this testimony, I do not concur with ComEd's assessment of what its "portion" of the goal is. (See, Table 4).

If the Commission ultimately adopts ComEd's methodology²¹ in calculating "banked" energy savings, which Staff recommends the Commission should not, then I recommend the Commission base the "banked" energy savings off ComEd's "portion" of the statutory goal recommended by Staff as referenced in the previous section (See, Table 4, top row), which would result in 46,035 MWh of "banked" energy savings.²²

²⁰ (Staff Exs. 1.1, 1.4, 1.5).

²¹ ComEd's "banking" methodology ignores whether the entire statutory energy efficiency standard is met for a given Plan Year. ComEd's "banking" method potentially would allow the Company to "bank" energy savings from a Plan Year when the statutory goal pursuant to 220 ILCS 5/8-103(b) has not been met. In this sense, ComEd's "banking" methodology results in "double counting" of energy savings, and it is not transparent to the public in terms of the purpose and intent of the statute set forth in 220 ILCS 5/8-103(a). While the variance in the amount of "banked" energy savings between the recommendations of ComEd and Staff is *de minimus* at this point in time, the "banking" methodology ultimately adopted by the Commission in this proceeding is very important and it will be precedent setting, given that the present Plan Year 2 energy savings dockets (Docket Nos. 10-0519 and 10-0520) represent the first opportunities for the Commission to implement the policy decision regarding "banking" it previously adopted in the Plan 1 Order. (Plan 1 Order at 41).

²² 46,035 $[(10\% \times 148,317) + (10\% \times 312,038)]$

B. PENALTIES PURSUANT TO 220 ILCS 5/8-103(i)

Q. Did ComEd meet its “portion” of the statutory energy savings goal for Plan Year 2?

A. Yes. Table 6 below reports the evaluation results from ComEd’s energy efficiency programs. The TRM-verified estimates reflect “deemed” values that influence the amount of energy savings that may be “claimed” from light bulbs.²³ (Plan 1 Order at 41-42). Using the “deemed” lighting values, the Company achieved 472,132 MWh of energy savings during PY2 according to the independent evaluations, which is over 100,000 MWh in excess of ComEd’s “portion” of the goal that it

²³ The TRM-verified estimates reflect deemed values for average displaced watts (delta watts), hours of use, and peak load coincidence factor, adjusted in PY2 for the additional impact of program bulbs that were installed in commercial locations for light bulbs. The Plan 1 Order states:

ComEd and DCEO seek Commission approval of their request to “deem” a table of measures that has annual kilowatt savings for those measures. This table concerns light bulbs. The kilowatt savings in that table were taken from California’s DEER program. (ComEd 6.0 at 39-40). “Deeming” is a way to stipulate to the value of energy efficiency measure savings with well-known and documented values for evaluation and program implementation purposes. These “deemed” values would be used for planning purposes and would also be used by the independent evaluator, unless that evaluator determined that they were inaccurate. Then, the changed value would be used prospectively from the time, at which, the evaluator determined that a new value should be used... As Staff points out, there seems to be no reason, at this time, to independently determine the energy savings values of certain types of light bulbs based on the values that were determined in California. However, “deeming” values now adds a level of certainty to, and definition in, the operation of a plan. And, light bulbs are not weather-sensitive. Therefore, DCEO’s recommendation that these values should be deemed, temporarily, with the final values to be determined before the end of the plan’s three-year period and applied prospectively, is a reasonable one.

(Plan 1 Order at 41-42). (Emphases added). “Banked” energy savings are used prospectively to comply with future Plan Years’ energy savings goals. In comparison to using “deemed” values, it is a better policy to have the amount of energy savings “banked” reflect the estimated energy savings based on the potentially more reliable evaluator-recommended values (especially in cases where those values stem from primary data collected in Illinois) that are known at the time at which the Commission approves the amount of energy savings “banked” (*i.e.*, the “banked” energy savings should be based on the best available information known at the time at which the amount of “banked” energy savings is being approved by the Commission).

needed to achieve to avoid penalties pursuant to 220 ILCS 5/8-103(i). (PY2 EM&V Summary Report at 2; ComEd Ex. 1.0 at 5; Staff Ex. 1.2).

Primary data from the ComEd service territory has been collected to further refine and improve the accuracy of these “deemed” lighting values. The evaluation-verified energy savings estimates in Tables 5 and 6 reflect revised hours of use (“HOU”) values based on the results from the extensive ComEd Residential Lighting metering study. (See, Staff Exs. 1.1, 1.4, 1.5).

Table 6. Comparison of Estimated Energy Savings due to ComEd's Energy Efficiency Programs with ComEd's "Portion" of the Energy Efficiency Standards

ComEd Service Territory		2009 (PY2)	Source
Energy Efficiency Standard	MWh	393,691	Docket No. 07-0540, Final Order at 10-11; Docket No. 07-0540, DCEO Ex. 1.1; Docket No. 07-0540, ComEd Ex. 1.0 at 16
ComEd's "Portion" of the Energy Efficiency Standard	%	79.3%	Docket No. 07-0540, Final Order at 19; Docket No. 07-0540, DCEO Ex. 1.1
ComEd's "Portion" of the Energy Efficiency Standard	MWh	312,038	Docket No. 07-0540, DCEO Ex. 1.1
Evaluation TRM-Verified Gross Energy Savings Estimates (ComEd-only)	MWh	709,553	PY2 EM&V Summary Report at 3; Staff Ex. 1.2
Evaluation TRM-Verified Net Energy Savings Estimates (ComEd-only)	MWh	472,132	PY2 EM&V Summary Report at 3; Staff Ex. 1.2; ComEd Ex. 1.0 at 5
Evaluation-Verified Gross Energy Savings Estimates (ComEd-only)	MWh	752,895	Navigant's DRR-Staff JLH 2.01; Staff Ex. 1.1 at 3
Evaluation-Verified Net Energy Savings Estimates (ComEd-only)	MWh	497,848	Navigant's DRR-Staff JLH 2.01; Staff Ex. 1.1 at 3

Q. Does ComEd agree that it met its “portion” of the energy savings goal?

A. Yes. However, as mentioned previously in this testimony, I do not concur with ComEd’s assessment of what its “portion” of the goal is. (See, Table 4). However, there is no dispute that ComEd met its “portion” of the savings goal under either measure of the goal.

C. SUMMARY OF FINDINGS

Q. Please summarize the results from your review.

A. My review revealed nothing that would indicate the energy efficiency standards set forth in Section 8-103 of the Act have not been met.²⁴ Based on the independent evaluation team's findings, the energy standards specified in Section 8-103 of the Act were exceeded in the first two Plan Years. (Navigant's DRR-Staff JLH 2; Staff Ex. 1.1; PY1 EM&V Summary Report at 1; PY2 EM&V Summary Report at 1). The achievement of energy savings in excess of the statutory targets results in 3,598 MWh "banked" in PY1 and 39,369 MWh "banked" in PY2, for a cumulative total of 42,967 MWh of energy savings "banked" at the end of PY2, available for use to comply with future energy efficiency standards. (Staff Ex. 1.1). A summary of the results are presented above in Tables 5 and 6.

Q. Why do you recommend the Commission accept the evaluation results as referenced in this testimony?

A. Ratepayer funds were spent independently evaluating the Company's energy efficiency efforts as required pursuant to 220 ILCS 5/8-103(f)(7). The work of the independent evaluation team seemed to be competently done and consistent with methods generally accepted in the EE evaluation community. Justifications for the methods used and other supporting documentation are all properly contained within the independent evaluation reports for PY2 filed in this docket on March 4, 2011 and the PY1 evaluation reports filed in the Plan 1 docket on March 12, 2010. The evaluation reports filed in this docket provide substantial evidence in this proceeding that ComEd met its "portion" of the energy savings goal for Plan Year 2,

²⁴ Failure to take issue with a particular methodology or approach used to estimate energy savings by the independent evaluation team should not be construed as an endorsement of those approaches.

292 and therefore, ComEd should not be assessed penalties pursuant to 220 ILCS 5/8-
293 103(i).

294 **IX. SUMMARY AND CONCLUSION**

295 **Q. Please summarize your recommendations.**

296 A. I recommend that the Commission acknowledge in its final order in this proceeding
297 that the statutory energy savings standards for PY1 and PY2 set forth in Section 8-
298 103 were achieved and 42,967 MWh of “banked” energy savings is available for
299 use to comply with energy savings standards in future Plan Years, if needed.

300 **Q. Does this conclude your prepared direct testimony?**

301 A. Yes.